



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

Washington State Energy Code Development
Standard Energy Code Proposal Form

Jan 2022

Log No. 21-GP3-027

Code being amended: ☒ Commercial Provisions ☐ Residential Provisions

Code Section # C503.4.6

Brief Description:

To remove EPCA preemption conflicts based on appliance energy source for additional and replacement heating systems.

Proposed code change text: (Copy the existing text from the Integrated Draft, linked above, and then use underline for new text and ~~strikeout~~ for text to be deleted.)

C503.4.6 Addition or replacement of heating appliances. Where a mechanical heating appliance is added or replaced, the added or replaced appliance shall comply with ~~Section C403.1.4 or with~~ an alternate compliance option in Table C503.4.6.

EXCEPTIONS:

7. Replacement of Like-for-like replacement of a single heating appliances is permitted where the rated capacity of the new equipment does not exceed the rated capacity of the existing equipment. that appliance is failing, requires immediate replacement, and where no other HVAC work is planned.

Table C503.4.6
Compliance Options for Mechanical Heating Equipment Alterations

	<u>Proposed Heating Equipment Type</u>	<u>Heating Efficiency Table Reference</u>	<u>Alternate Compliance Options to Section C403.1.4</u>
<u>3</u>	<u>Furnaces, duct furnaces, and unit heaters</u>	<u>Table C403.3.2(5)</u>	<u>1. Efficiency: +540%^b</u>
<u>4</u>	<u>Gas-fired hot water boilers with fewer than 80% of served coils replaced</u>	<u>Table C403.3.2(6)</u>	<u>1. Efficiency: +540%^b</u>

^b Equipment shall have a capacity-weighted average heating system efficiency that is 540 percent better than that shown in the reference table (1.10 x values in reference table)

Purpose of code change:

C503.4.6 as currently written "unduly burdens interstate commerce" under EPCA because it places an increased economic expense on replacement gas-fired appliances. No Cost Benefit analysis was provided to analyze the expense of retrofit to replacing 2 or more gas-fired appliances with electric appliances. Also, per EPCA "there also shall be at least one

combination which includes such covered product the efficiency of which does not exceed such standard or level by more than 5 percent”

Your amendment must meet one of the following criteria. Select at least one:

- | | |
|---|--|
| <input type="checkbox"/> Addresses a critical life/safety need. | <input checked="" type="checkbox"/> Consistency with state or federal regulations. |
| <input type="checkbox"/> The amendment clarifies the intent or application of the code. | <input type="checkbox"/> Addresses a unique character of the state. |
| <input type="checkbox"/> Addresses a specific state policy or statute.
(Note that energy conservation is a state policy) | <input type="checkbox"/> Corrects errors and omissions. |

Check the building types that would be impacted by your code change:

- | | |
|--|---|
| <input type="checkbox"/> Single family/duplex/townhome | <input checked="" type="checkbox"/> Commercial / Retail |
| <input checked="" type="checkbox"/> Multi-family 1 – 3 stories | <input checked="" type="checkbox"/> Institutional |
| <input checked="" type="checkbox"/> Multi-family 4 + stories | <input checked="" type="checkbox"/> Industrial |

Your name	Ian Casey	Email address	ian.casey@nwnatural.com
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Economic Impact Data Sheet

Is there an economic impact: ☒ Yes ☐ No

Briefly summarize your proposal's primary economic impacts and benefits to building owners, tenants, and businesses. If you answered "No" above, explain your reasoning.

Provides more appliance choices for designers and builders to select equipment that best fits the needs of the specific building type and use to provide a more affordable installation cost and long term operational costs.

Provide your best estimate of the **construction cost** (or cost savings) of your code change proposal? (See OFM Life Cycle Cost [Analysis tool](#) and [Instructions](#); use these [Inputs](#). **Webinars on the tool can be found [Here](#) and [Here](#)**)

\$[Click here to enter text.](#)/square foot (For residential projects, also provide \$[Click here to enter text.](#)/ dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

Costs will vary widely depending on the application. There is insufficient time to generate these calculations.

Provide your best estimate of the **annual energy savings** (or additional energy use) for your code change proposal?

[Click here to enter text.](#)KWH/ square foot (or) [Click here to enter text.](#)KBTU/ square foot

(For residential projects, also provide [Click here to enter text.](#)KWH/KBTU / dwelling unit)

Show calculations here, and list sources for energy savings estimates, or attach backup data pages

List any **code enforcement** time for additional plan review or inspections that your proposal will require, in hours per permit application:

Small Business Impact. Describe economic impacts to small businesses:

Housing Affordability. Describe economic impacts on housing affordability:

Other. Describe other qualitative cost and benefits to owners, to occupants, to the public, to the environment, and to other stakeholders that have not yet been discussed: